

SERVICE MANUAL

DC Integrated Stereo Amplifier

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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CAUTION

♠ Parts marked with this sign are safety critical components. They must always be replaced with identical components—refer to the appropriate parts list and ensure exact replacement.

NOTE:

As regards the resistors and capacitors, refer to the circuit diagrams and the PCB ass'y drawings included in this brochure.

SPECIFICATIONS

Output Power

*75 watts per channel minimum RMS, both channels driven into 8 ohms from 40 Hz to 20 kHz with no more than 0.05% total harmonic distortion.

90W + 90W (8 ohms DIN, 1 kHz) 97W + 97W (8 ohms Dynamic Power) 114W + 114W (6 ohms Dynamic Power)

Input Sensitivity/Impedance

PHONO: MM; 2.5 mV/47 kohms MC; 250 μ V/100 ohms

CD/VCR, TAPE1/DAT, TAPE2, TUNER: 150 mV/30 kohms

MIC: 0.6 mV/47 kohms

Frequency Response

CD/VCR, TAPE1/DAT, TAPE2, TUNER: 5 Hz - 40 kHz

-3 dB (Line In to SP Out)

PHONO: 20 Hz - 20 kHz ±0.5 dB (RIAA)

Total Harmonic Distortion

Damping Factor

Tone Control

Filter

Muting

Loudness Control

Power Consumption

Dimensions (WxHxD)

Output Level/Impedance

Signal-to-Noise Ratio (IHF A Network)

30 (1W, 50 Hz)

0.05%

TAPE1/DAT, TAPE2: 142 mV/1 kohm

PHONO: MM; 80 dB

MC; 60 dB

CD/VCR, TAPE1/DAT, TAPE2, TUNER: 96 dB

Bass: ±10 dB at 100 Hz Mid: ±6 dB at 1 kHz

Treble: ±10 dB at 10 kHz

-15/-24/-17 dB at 100 Hz/1 kHz/10 kHz

High Filter: -3 dB at 10 kHz Low Filter: -3 dB at 100 Hz

-20 dB

115/230V AC, 50/60 Hz (General Export) **Power Requirements**

120V AC, 60 Hz (USA/Canada) 220V AC, 50 Hz (Europe) 240V AC, 50 Hz (UK/Australia)

435 x 152 x 325 mm (17-1/8" x 6" x 12-13/16")

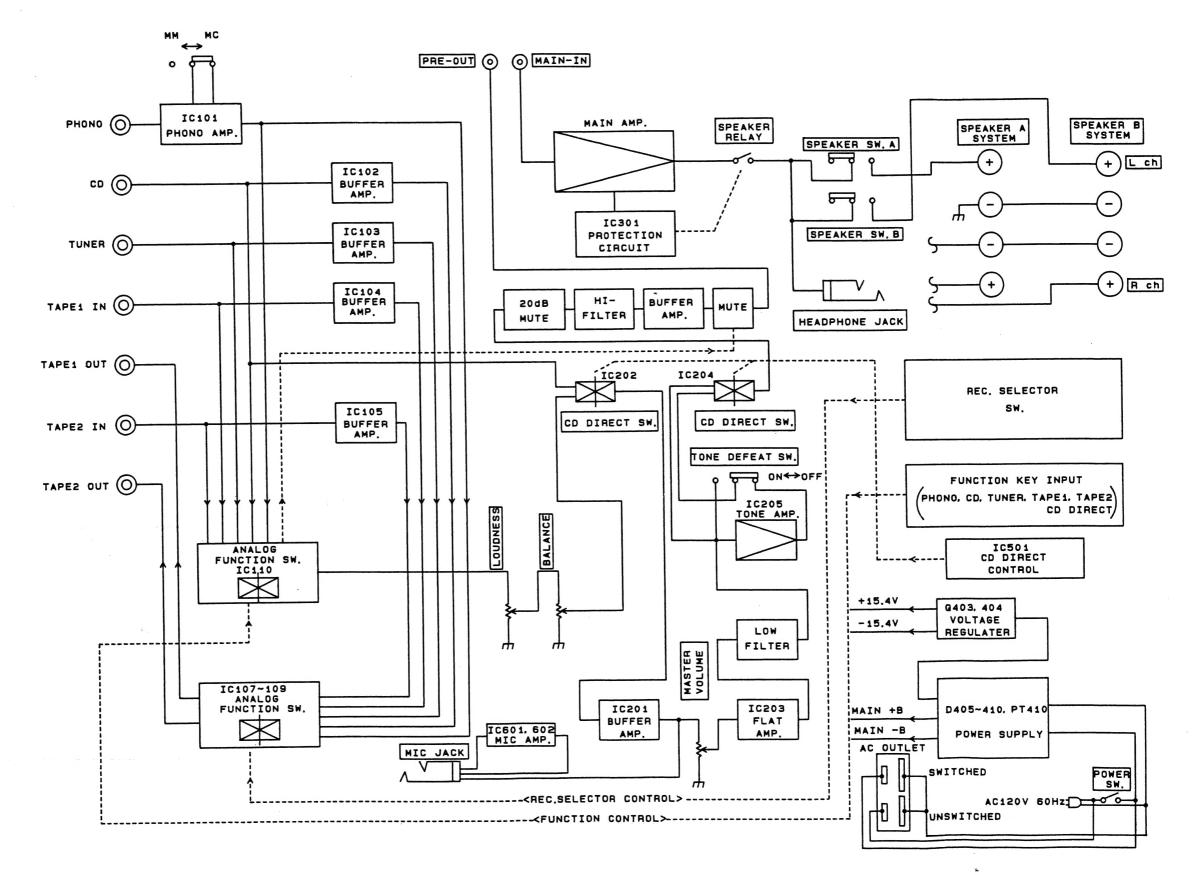
Weight (net) 9.0 kg (19.81 lbs)

Measured pursuant to Federal Trade Commission's Trade Regulation Rule on Power Output Claim for Amplifier in U.S.A.

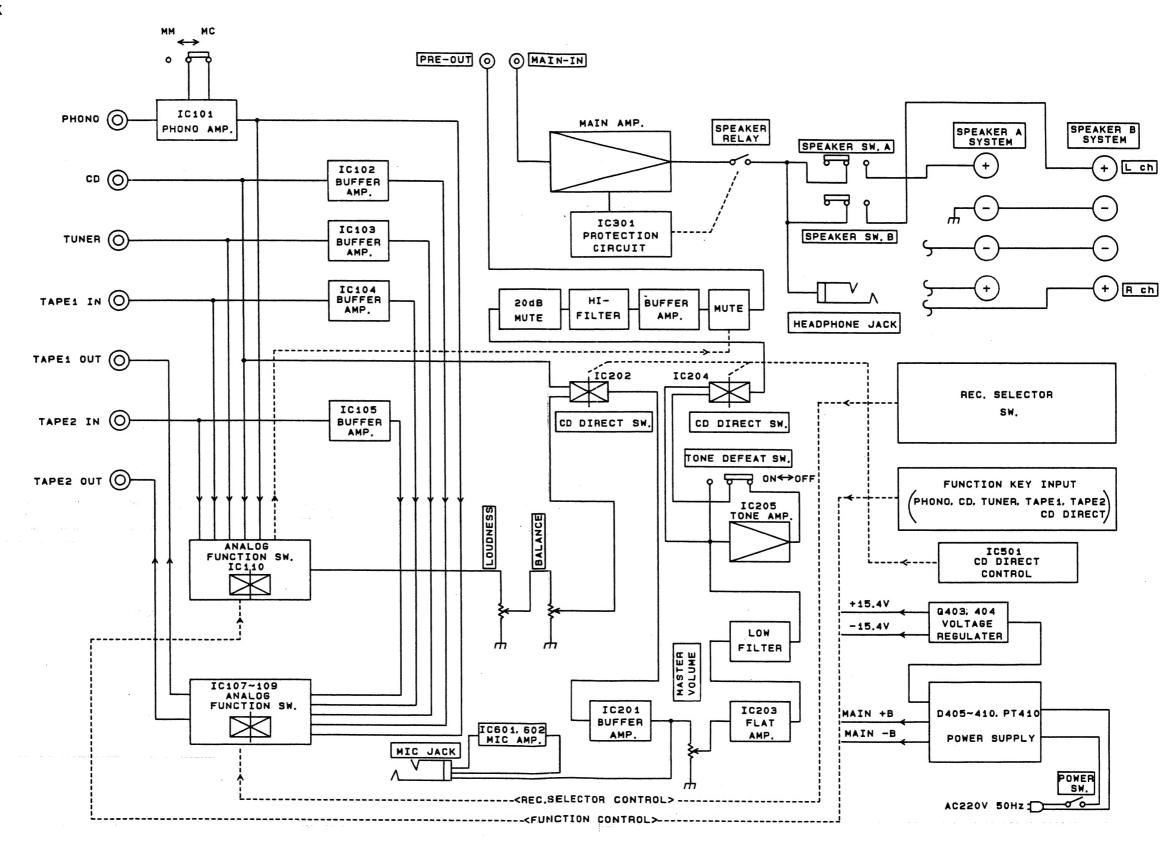
^{**}Improvements may result in specification or feature changing without notice.

BLOCK DIAGRAMS

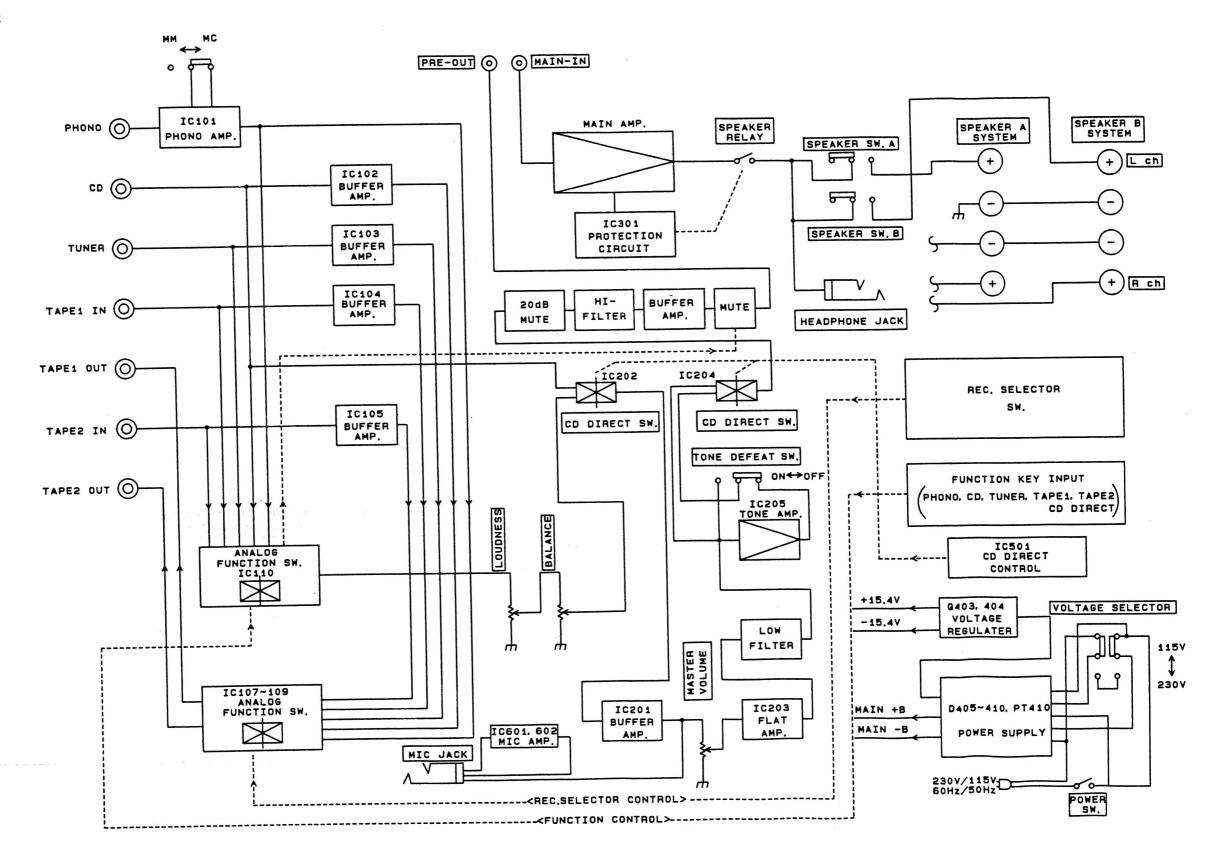
Canada



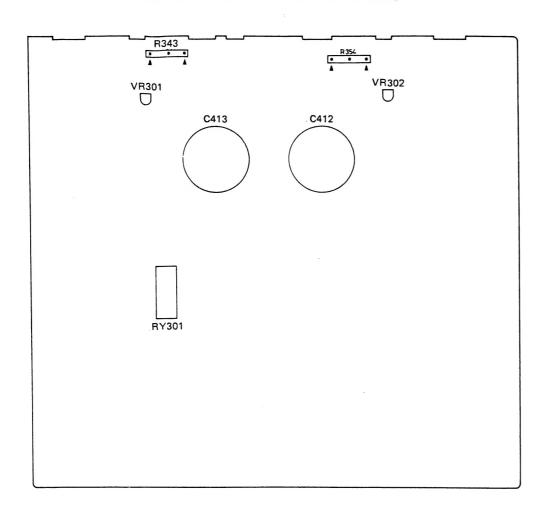
Europe, U,K



General Export



ADJUSTMENT AND CHECKS



AMPLIFIER SECTION

Condition

Power requirements: 120V AC, 60 Hz (Canada)

220V AC, 50 Hz (Europe) 115V/230V AC, 60 Hz/50 Hz (General Export)

240V AC, 50 Hz (UK)

Input: Output load: No signal 8 ohms

- Idling current
 - 1. Set the Power switch to ON and wait for 3 minutes for preheating.
 - 2. Connect a DVM (Digital Voltage Meter) across R343 (0.22 ohms x 2 = 0.44 ohms).
- 3. Adjust VR301 (L CH) so that the DVM reads 7 ±0.1 mV
- Connect the DVM across R344 (0.22 ohms x 2 = 0.44 ohms).
- 5. Adjust VR302 (R CH) so that the DVM reads 7 ±0.1 mV.

EXPLODED VIEW

REF. NO. PARTS NO. DESCREPTION	EXPLODED V	1 EW	
M 3	REF. NO.	PARTS NO.	DESCREPTION
MI15	IM 3 IM 6 IM 7	*9A02213500 9A02102300 9A02102300	FRONT BASE TACT BUTTON, 5 TACT BUTTON
*9A02213800 REAR PANEL [E] *9A02212800 REAR PANEL [UK] *9A02212800 REAR PANEL [UK] *9A02213900 TRANSFORMER CHASSIS MI 9A02213900 VR KNOB (16) MI 3 5800752300 POWER BUTTON B MI *5720175500 TEAC EMBLEM MI *9A01202500 SIDE CHASSIS MI *9A01202500 SIDE CHASSIS MI *9A01202500 SIDE CHASSIS MI *9A01203800 HEAT SINK METAL-FITTING F MI *9A01203900 HEAT SINK METAL-FITTING R MI *9A01204000 HEAT SINK METAL-FITTING R MI *9A01204400 HEAT SINK METAL-FITTING R MI *9A01204400 HEAT SINK METAL-FITTING R MI *9A01204400 TRANSFORMER METAL-FITTING R MI *9A01204400 TRANSFORMER METAL-FITTING SPACER MI *9A01519100 LED SPACER MI *9A00315700 TAP SCREW TBH-30X08-Y MI *9A00315700 TAP SCREW TPM+30X08-B MI *9A00315800 TAP SCREW TPM+30X08-B MI *9A00315800 TAP SCREW TPM+30X08-B MI *9A00315800 TAP SCREW TSB-30X06-Y TAP SCREW TSB-30X08-Y TAP SCREW TSB-30X06-Y TAP SCREW TSB-30X08-Y TAP SCREW TSB-3	1M15 1M16 1M17	9A02102400 *9A02102500 *9A02102500	PUSH BUTTON LED LENS, 5 LED LENS
M25	IM2I	*9A02213800 *9A02212600	REAR PANEL [E] REAR PANEL [UK]
2M 4 *5720175500 TEAC EMBLEM 2M 5 *9A02214300 FOOT ASSY 3M 1 *9A01202500 SIDE CHASSIS 3M 2 *9A01203600 CENTER CHSSSIS 3M 4 *9A01203800 HEAT SINK METAL-FITTING F 3M 5 *9A01204000 HEAT SINK METAL-FITTING C 3M 6 *9A01204000 HEAT SINK METAL-FITTING R 3M 8 *9A01204000 HEAT SINK METAL-FITTING R 3M 8 *9A01204000 HEAT SINK 3M 9 *9A01202800 HEAT SINK 3M 9 *9A01203300 HEAT SINK 3M 9 *9A01203300 HEAT SINK 3M 9 *9A01203300 HEAT SINK 3M 9 *9A01204500 INSULATION COVER [E,UK,GE] 3M 6 *9A01204500 TRANSFORMER METAL-FITTING 3M 7 *9A02114200 SPACER 3M 8 *9A01523900 CABIMAT 3M 9 *9A01519100 LED SPACER 5M 1 *9A00315700 TAP SCREW TBH+26X08-B [GE] 5M 6 *9A00315700 TAP SCREW TPM+30X08-Y 5M 8-M12 *9A00315700 TAP SCREW TPM+30X08-B 5M 1 *9A00314000 TAP SCREW TPM+30X08-B 5M 1 *9A00315800 TAP SCREW TSB+30X06-Y 5M 2 *9A00315800 TAP SCREW TSB+30X06-Y 5M 2 *9A00315800 TAP SCREW TSB+30X06-Y 6M 1,M 2 *9A00315800 TAP SCREW TSB+30X06-Y 6M 6-MII *9A00326900 TAP SCREW TSB+30X06-Y 6M 6-MII *9A00326900 TAP SCREW TSB+30X06-B 6M 13,M 4 *9A00326900 TAP SCREW TSB+30X08-B 6M 6 *9A00315900 TAP SCREW TSB+30X08-B 6M 6 *9A00315900 TAP SCREW TSB+30X08-B 7AP SCREW TSB+30X08-B 7AP SCREW TSB+30X08-B 7AP SCREW TSB+30X08-Y 7AP SCREW TSB+30X08-Y 7AP SCREW TSB+30X08-Y 7AP SCREW TSB+40X08-B 7AP SCREW TSB+40X08-P 7AM 1 *9A00317300 TAP SCREW TSB+40X08-P 7AM 1 *9A003173	1M25 2M 1 2M 2 2M 3	*9A01522600 9A02213900 9A01046100	TRANSFORMER CHASSIS VR KNOB (46) VR KNOB (16)
3M10	2M 4 2M 5 3M I 3M 2	*9A02214300 *9A01202500 *9A01202600	FOOT ASSY SIDE CHASSIS CENTER CHSSSIS
3M24	3M10	*9A01202800	HEAT SINK
5M 6	3M24 3M27 3M28	*9A01204400 *9A02114200 *9A01523900	TRANSFORMER METAL-FITTING SPACER CABIMAT
5M21-M25 *9A00315800 TAP SCREW TSB+30X06-Y 5M26 *9A00315800 TAP SCREW TSB+30X06-Y 5M28-M30 *9A00315800 TAP SCREW TSB+30X06-Y 6M 1,M 2 *9A00315800 TAP SCREW TSB+30X06-Y 6M 6-M11 *9A00326900 TAP SCREW TSB+30X06-B 6M13,M14 *9A00629500 TAP SCREW TSB+30X08-Y 6M16 *9A00389600 TAP SCREW TSB+30X08-B 6M26 *9A00315900 TAP SCREW TSB+30X08-Y 6M27 *9A01207900 TAP SCREW TSB+40X08-Y 6M29 *9A00334700 TAP SCREW TSB+40X08-B 7M 1 *9A00391300 TAP SCREW TSB+40X10-Y 7M 7 *9A01205500 NYLON PUSH RIVET [E,UK,GE] 7M14 *9A00317300 TAP SCREW TBB+30X08-Y [E]	5M 6 5M 8-M12 5M13.M14	*9A00315700 *9A00315700 *9A00314000	TAP SCREW TPM+30X08-Y TAP SCREW TPM+30X08-Y TAP SCREW TPM+30X08-B
6M13,M14 *9A00629500 TAP SCREW TSB+30X08-Y 6M16 *9A00389600 TAP SCREW TSB+30X08-B 6M26 *9A00315900 TAP SCREW TSC+30X08-Y 6M27 *9A01207900 TAP SCREW TSB+40X08-Y 6M29 *9A00334700 TAP SCREW TSB+40X08-B 7M I *9A00391300 TAP SCREW TSB+40X10-Y 7M 7 *9A01205500 NYLON PUSH RIVET [E,UK,GE] 7M14 *9A00317300 TAP SCREW TBB+30X08-Y [E]	5M21-M25 5M26 5M28-M30	*9A00315800 *9A00315800 *9A00315800	TAP SCREW TSB+30X06-Y TAP SCREW TSB+30X06-Y TAP SCREW TSB+30X06-Y
7M I *9A00391300 TAP SCREW TSB+40X10-Y 7M 7 *9A01205500 NYLON PUSH RIVET [E,UK,GE] 7MI4 *9A00317300 TAP SCREW TBB+30X08-Y [E]	6M13,M14 6M16 6M26	*9A00629500 *9A00389600 *9A00315900	TAP SCREW TSB+30X08-Y TAP SCREW TSB+30X08-B TAP SCREW TSC+30X08-Y
THE STATE OF THE SOURCE TERMS OF THE SOURCE TE	7M 1 7M 7 7M14	*9A00391300 *9A01205500 *9A00317300	TAP SCREW TSB+40X10-Y NYLON PUSH RIVET [E,UK,GE] TAP SCREW TBB+30X08-Y [E]
7M20 *9A01276500 TAP SCREW TBC+30X12-Y	7M20	*9A01276500	TAP SCREW TBC+30X12-Y

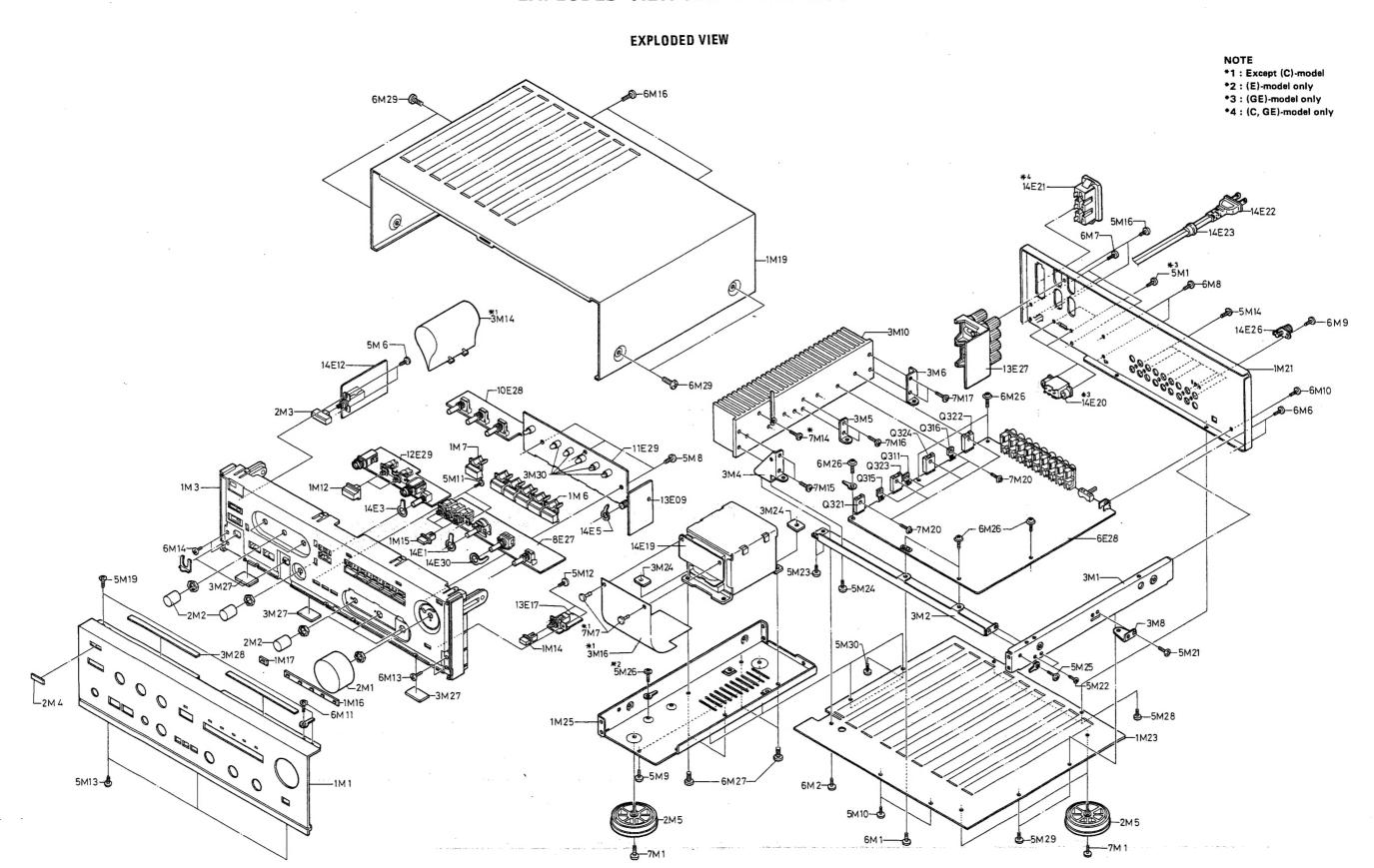
REF. NO.	PARTS NO.	DESCREPTION
6E28 8E27 10E28 11E29 12E29		LOUDNESS VOLUME PCB
13E 9 13E17 13E27 14E 1 14E 3	*9A02218500	
14E 5 14E12 14E19 14E20	*9A02216300	POWER SWITCH PCB POWER TRANS PCB
14E21 14E22	Δ*9A02110900 Δ*9A02114500 Δ*9A02114700	AC OUTLET [C] AC OUTLET [GE] LINE CORD [C] LINE CORD [E] LINE CORD [UK] LINE CORD [GE]
14E23 14E26 14E30	Δ*9A02111700 *9A01208800	GROUND TERMINAL
Q315,316 Q321,322 Q323,324 Q331	9A01210800 9A01211500 9A01210500 9A01210800	TRANSISTOR 2SD2052-S,P TRANSISTOR 2SB1361-S,P
PT40I	♠ 9A02212500	POWER TRANSFORMER [C] POWER TRANSFORMER [E] POWER TRANSFORMER [UK] POWER TRANSFORMER [GE]

INCLUDED ACCESSORIES

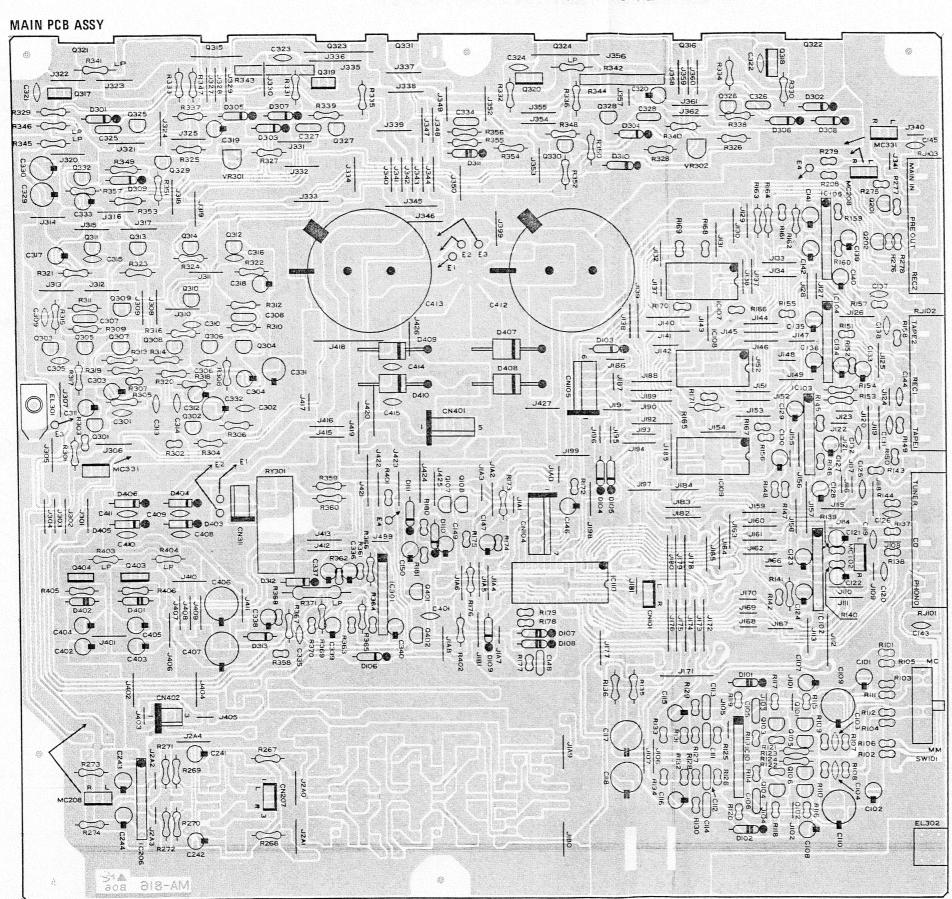
REF. NO.	PARTS NO.	DESCREPTION
	*9A01844800 *9A02211900 *9A02221500 *9A02212000 *9A02221600	OWNER'S MANUAL(M) [A-X750] SOLDER-PLATED WIRE [C] SOLDER-PLATED WR [E,UK,GE] SOLDER-PLATED WIRE [C] SOLDER-PLATED WR [E,UK,GE]
	*9A02111100 *9A02111200 *9A02111300 *9A02111400 *9A02115600	SOLDER-PLATED WIRE [GE] SOLDER-PLATED WIRE [GE] SOLDER-PLATED WIRE [GE] SOLDER-PLATED WIRE [GE] SOLDER PLATED WIRE [GE]

[C]:CANADA [E]:EUROPE [UK]:U.K. [GE]:GENERAL EXPORT

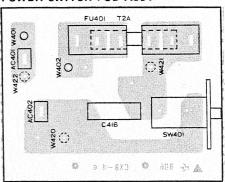
EXPLODED VIEW AND PARTS LIST



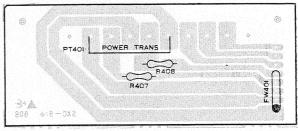
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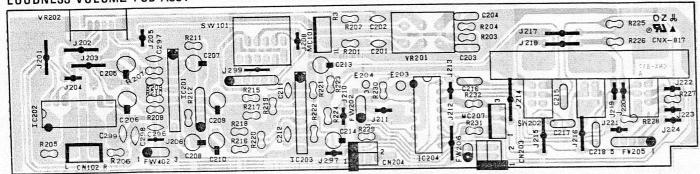
POWER SWITCH PCB ASSY



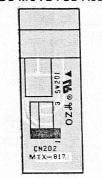
POWER TRANS PCB ASSY



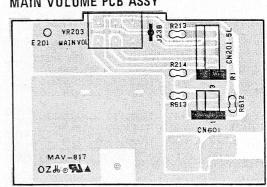
LOUDNESS VOLUME PCB ASSY



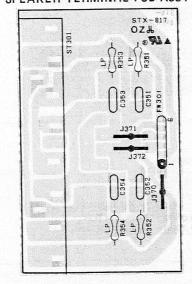
20 DB MUTE PCB ASSY



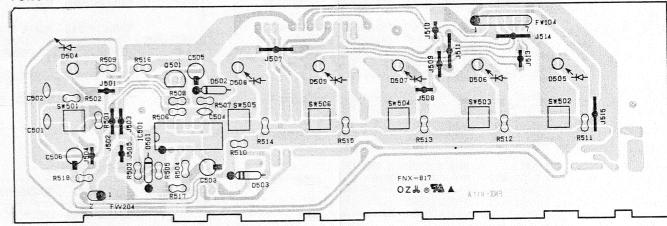
MAIN VOLUME PCB ASSY



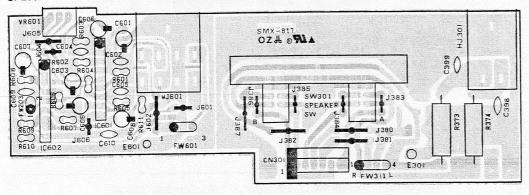
SPEAKER TERMINAL PCB ASSY



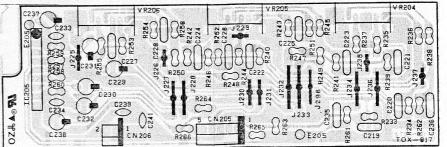
FUNCTION SELECTOR PCB ASSY



SPEAKER SELECTOR PCB ASSY



TONE CONTROL PCB ASSY



MAIN PCB ASSY

REF. NO.	PARTS NO. DESCREPTION
ICI01-105 ICI07-109 ICI10	*9A02219100 MAIN PCB ASSY [C,UK,GE] *9A02219110 MAIN PCB ASSY [E] 9A012003000 IC NJM4565SB 9A02103000 IC TC9214P 9A01198700 IC LC781B
Q107,401	9A01200300 IC NJM4565SB 9A01207500 IC TA7317P 9A02214700 TRANSISTOR 2SC3329-GR 9A02121300 TRANSISTOR 2SK381-D,E 9A01205300 TRANSISTOR RN-1204
Q108,402 Q201,202 Q303-310 Q311,312 Q313,314	9A02102900 TRANSISTOR RN2207 9A00308100 TRANSISTOR 2SC2878-A,B 9A00657000 TRANSISTOR 2SC2240-GR 9A01209900 TRANSISTOR 2SA1145-0,Y 9A01211000 TRANSISTOR 2SC2705-0,Y
Q317,318 Q319,320 Q325,326 Q327,328 Q329,330	9A00592300 TRANSISTOR 2SCIBI5-GR 9A01648200 TRANSISTOR 2SA1015-GR
Q332 Q403 Q404 D101,102 D103-106	9A00657100 TRANSISTOR 2SA970-GR 9A02214800 TRANSISTOR 2SB632K-E 9A02214900 TRANSISTOR 2SD612K-E 9A00598100 ZENER DIODE ZD50-062 9A01209500 DIODE IN4148
D107,108 D109-111 D301-310 D311 D312	9A00577100 ZENER DIODE ZD50-074 9A01209500 DIODE IN4148 9A01209500 DIODE IN4148 9A00598100 ZENER DIODE ZD50-062 9A00275400 DIODE IN4002
D313 D401,402 D403-406 D407-410 VR301,300	9A00275300 DIODE 1N5402-F
R329-332 R341,342 R343,344 R345,346 R403,404	9A01195700 R. FLAME PROOF FR50ST221J 9A01199000 R. CEMENT MPC725R22KX2LF 9A02103400 R. FLAME PROOF FR50ST100J
L101,102 L103,104 RY301 SWI01 RJ101-10	9A00595200 INDUCTOR (IMH) 9A01193200 RELAY 9A02215400 SLIDE SWITCH
CN101,20 CN104 CN105 CN311 CN401	9A01193600 CONNECTOR 9A01651600 CONNECTOR 9A01213200 CONNECTOR 9A01213000 CONNECTOR 9A01213100 CONNECTOR
CN402 MC102 MC208 MC331 E 1- 3	*9A02215800 MICRO SOCKET ASSY
E 4	*9A02215500 SOLDER-PLATED WIRE

POWER SWITCH PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*9A02219200	POWER SW PCB ASSY [C,GE]
SW401	*9A02219210 \$\Delta\$ 9A01206900	
C416		C. METAL FILM YEIO3
FU401		
FU401	9A02216100	FUSE (E,UK)
W420	*9A02107700	
W421	*9A02107800	
W422	*9A02107900	
	*9A00279200	FUSE HOLDER [E,UK]
	*9A01626600	FUSE HOLDER [C,GE]

POWER TRANS PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*9A02219300	POWER TRANS PCB ASSY
	*9A02219310 \$\triangle 9A02106900 \$\triangle 9A00276000	POWER TRANS PCB ASSY [E] R. FLAME PROOF FR25ST2R2J C. CERAMIC HE9OSJYF223Z
FW401	*9A02212100	5-CONDUCTOR, SHIELDED CABLE [C.UK.GE
FW401	*9A02216400	5-LEAD, FLAT CABLE [E]

LOUDNESS VOLUME PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
g sees	*9A02219400	LOUDNESS VOLUME PCB ASSY [C, UK,GE
	*9A02219410	LOUDNESS VOL. PCB ASSY [E]
10201,203	9A01200300	IC NJM4565SB
10202,204	9A02103800	IC TC9215P
VR201	9A02216700	ROTARY POTENTIOMETER
VR202	9A02117100	ROTARY POTENTIOMETER
		ROTARY SWITCH
SW202	9A02216900	PUSH SWITCH
MC101	*9A02215600	MICRO SOCKET ASSY
MC207	*9A02217400	MICRO SOCKET ASSY
FW103	*9A02217000	6-LEAD, FLAT CABLE 5-LEAD, FLAT CABLE
FW201	*9A02116300	5-LEAD, FLAT CABLE
FW202	*9A02217100	3-LEAD, FLAT CABLE 5-LEAD, FLAT CABLE
FW205	*9A02217200	5-LEAD, FLAT CABLE
FW206	*9A02217300	2-LEAD, FLAT CABLE
FW402	*9A02115900	3-LEAD, FLAT CABLE
I		

SPEAKER TERMINAL PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
R351-354 ST301 FW301	9A02217700 9A02217800	SPEAKER TERMINAL PCB ASSY R. FLAME PROOF FR25ST100J SOKET 8P (S.P) 6-LEAD FLAT CABLE

SPEAKER SELECTOR PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*9A02219600	SPEAKER SELECTOR PCB ASSY [C.UK.GE]
	*9A02219610	
10601,602	9A01200300	IC NJM4565SB
VR601	9A02218000	ROTARY POTENTIOMETER
R373,374	9A01524500	R. METAL OXIDE
SW301	9A02218100	PUSH SWITCH
HJ301	9A01208400	PUSH SWITCH HEAD PHONE JACK MIC JACK
CN301	9A01213200	CONNECTOR
F301	*9A02211700	SOLDER-PLATED WIRE
E601	*9A02211700 *9A02211800	SOLDER-PLATED WIRE
	*9A02218200	
	*9A02218300	
	*9A02218400	

20 DB MUTE PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
SW201 CN202		20 DB MUTE PCB ASSY PUSH SWITCH CONNECTOR

MAIN VOLUME PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*9A02219800	MAIN VOLUME PCB ASSY [C.UK.GE]
	*9A02219810	MAIN VOLUME PCB ASSY [E]
VR203	9A02107300	ROTARY POTENTIOMETER
CN201	9A01213100	CONNECTOR
CN601	9A01212900	CONNECTOR
E201	*9A02211700	SOLDER-PLATED WR [C.UK.GE
E201	*9A02211800	
E202	*9A02211800	SOLDER-PLATED WR [C,UK,GE
E290	*9A02220600	SOLDER-PLATED WIRE
		Action Control of the

FUNCTION SELECTOR PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
	*9A02219900	FUNCTION SELECTOR PCB ASS
1C501	9A01207600	IC TC4013BP
0501	9A00592300	TRANSISTOR 2SCIBI5-GR
	9A01209500	DIODE IN4148
D503		ZENER DIODE ZD50-074
D504-509	9A01206600	LED
SW501-506	9A01206700	TACT SWITCH
FW104		7-LEAD, FLAT CABLE
FW204	*9A02218200	

TONE CONTROL PCB ASSY

REF. NO.	PARTS NO.	DESCREPTION
1C205 VR204-206 CN205	*9A02220000 *9A02220010 9A01200300 9A02221200 9A01213100	TONE CTL PCB ASY [C,UK,GE TONE CONTROL PCB ASSY [E] IC NJM4565SB ROTARY POTENTIOMETER CONNECTOR
CN206 1WI I	9A02104200 *9A02221300	CONNECTOR SOLDER-PLATED WIRE

[C]:CANADA [E]:EUROPE [UK]:U.K. [GE]:GENERAL EXPORT

